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REMARKS

The Office Action dated February 1, 2007, has been carefully reviewed. Claims 1, 11 and 17 are amended. Claims 1-20 remain in the applications. It is respectfully requested that the Examiner reconsider the rejection of the claims in view of the amendments herein and the following remarks.

Several amendments are being made to the specification. It is respectfully asserted the amendments are merely to correct typographical errors in the specification and no new matter is being presented herein.

In the Office Action, the Examiner rejected claims 1-10, 12 and 17-20 under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. The Examiner asserted that the claims contain subject matter that was not described in the specification.

The Examiner particularly pointed out "scrambling said set of uniformly spaced samples" as recited in Claim 1, line 7 and in claim 12. It is respectfully requested the Examiner reference the specification, beginning at paragraph [0019], along with Figure 3. It is respectfully asserted that the specification describes generating a set of uniformly spaced samples and a uniform distribution of the spaced samples. Paragraphs [0023] and [0024] describe the scrambling of the samples. Therefore, it is respectfully requested that the Examiner withdraw the rejection of claims 1-10 and claim 12.

The Examiner asserted that the limitation in claim 17 directed to "a third component for reducing said total number of samples needed to achieve a given statistical accuracy" is also not supported in the specification. It is respectfully requested the Examiner refer first to paragraph [0003] and then to paragraphs [0025], [0026], Figure 3 and reference number (18). It is respectfully asserted that these portions of the specification provide support for the claimed limitation. The specification describes need to provide a very large number of random samples for a desired accuracy. The present invention utilizes "companding" and the specification explains how "companding" reduces the number of samples generated between the popular region for a given number of total samples. It is further described that by increasing the spacing for the high probability area, fewer samples are present in the high-probability area. "Companding" as it is known to one of ordinary skill in the art is a process in which the dynamic range of a signal is reduced and then expanded to its original value for reproduction or playback. Therefore, it is respectfully asserted that the specification adequately supports the claim language

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in Claim 17 referencing "a third component for reducing said total number of samples needed to achieve a given statistical accuracy". It is respectfully requested the Examiner withdraw the rejection of claims 17-20.

The Examiner rejected claims 1-20 under 35 U.S.C. § 112, second paragraph for the language described above with reference to claims 1 and 12. It is respectfully asserted that support for the claim limitation can be found at paragraphs 0019-0024 and Figure 3. The Examiner also asserted that Claims 1, 11 and 17 appear incomplete since it is directed to a method for generating a set of random numbers, but it is unclear how the set of random numbers is generated. The claims have been amended to include the language "computer-based" in order to overcome this rejection. Support for the amendments can be found in the specification at paragraph [0002] and paragraph [0029], which describe a computer-based method and system. It is respectfully requested the Examiner withdraw the rejection of claims 1-14 under 35 U.S.C. § 112.

The Examiner rejected claims 1-20 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. It is respectfully requested the Examiner reconsider the claims of the present invention as a whole in light of the amendments herein. The amended claims include a computer-based method and system. It is respectfully asserted that the claims are directed to a computer-based random number generator, which is not merely a mathematical formula. It is also respectfully asserted that the present invention accomplishes a practical application. The article is a random number generator and the action is random number generation used to provide approximate solutions for a variety of mathematical problems. See for example, paragraph [0029] to [0031] which explain how the claims of the present invention may be applied to a satellite service application.

It is respectfully asserted that the claims do not cover only a computer-implemented method of calculation as asserted by the Examiner. When the claims are interpreted in light of the supporting disclosure, the claimed invention is clearly a computer-based method and system for random number generation. The claimed method steps emphasize a method and system for random number generation and also clearly describe converting samples (recited in the claims as a set of uniformly spaced samples between an upper limit and a lower limit) into an output of samples, i.e., a set of random number outputs (recited in the claims as mapping and scrambling said set of uniformly spaced samples). It is respectfully asserted that the claims are directed to

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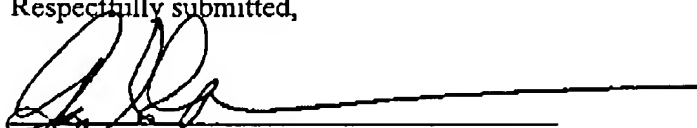
statutory subject matter and not just generating a set of numbers as asserted by the Examiner. The present invention claims a random number generator that transforms an article (uniformly spaced samples) into a useful, concrete and tangible result in the form of a scrambled set of uniformly spaced samples.

A random number generator that provides random number generation according to the present invention may be applied to a variety of mathematical problems to provide approximate solutions. A computer-based system and method for random number generation is not in and of itself merely a mathematical formula. It is respectfully asserted that the computer-based method and system for a random number generator claimed in claims 1-20 of the present invention is statutory subject matter. It is respectfully requested the Examiner withdraw the rejection.

CONCLUSION

It is respectfully requested the Examiner reconsider the present application in light of the amendments and remarks herein. Should the Examiner remain unconvinced by the remarks herein, he is respectfully requested to contact the undersigned attorney to discuss possible changes to the claims that would be sufficient to bring the claims into condition for allowance.

Respectfully submitted,


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